

**Cherokee Information Services,
Inc.**

**Briefing to OSJTF
on**

**Implementing a
CADM Compliant EIA**

September 22, 2005

Topic

- Discuss the current benefits and issues using CADM data to create ISPs and improve tool interoperability inside and outside of DCGS-A (e.g., FCS, NCES, DIB).

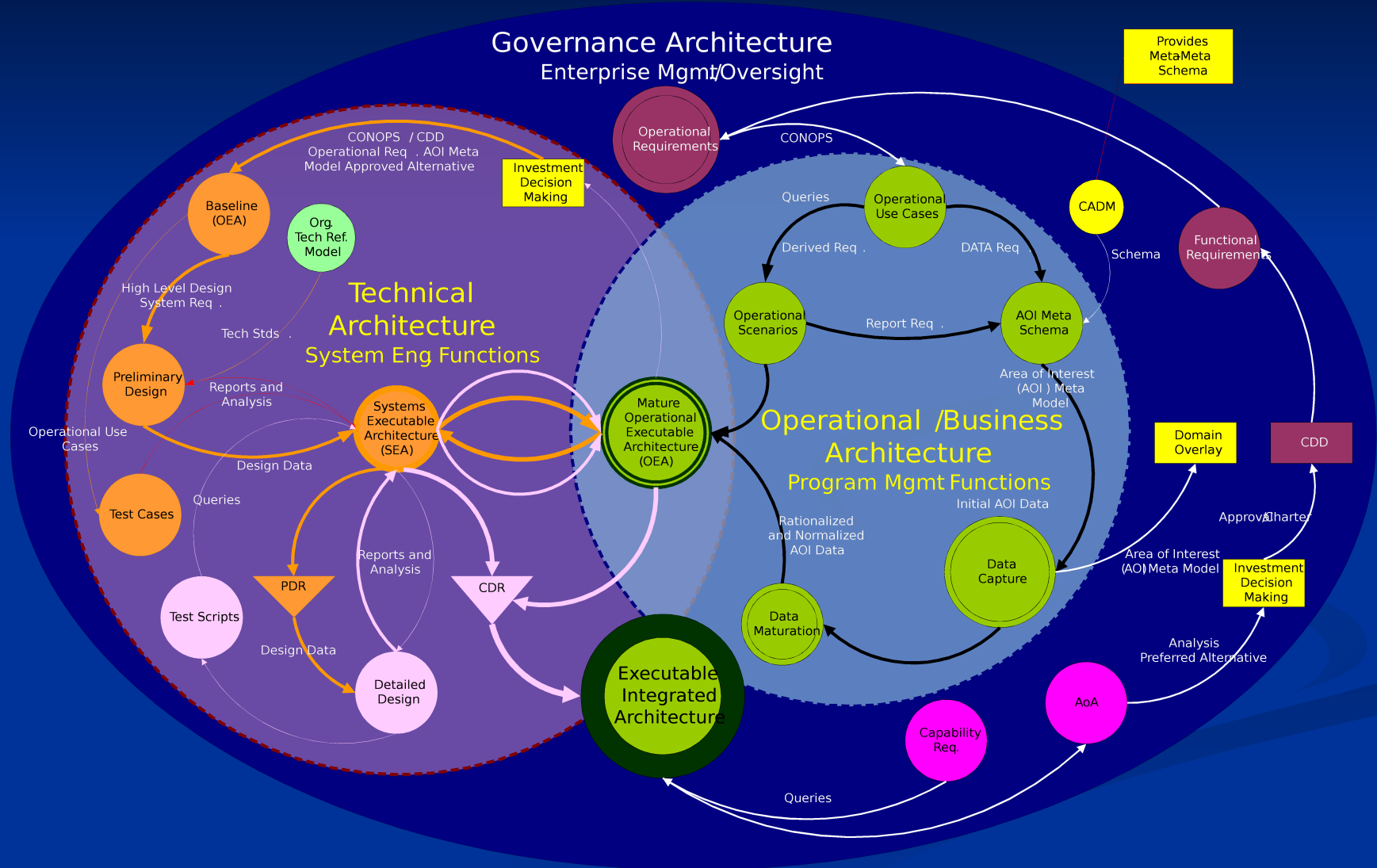
Issues

- CADM provides a physical schema which can enable better analysis.
 - CADM provides the basic elements of the operational and systems architecture which provides part of the core information to support analysis required in the ISP.
 - Doesn't address quality and total lifecycle management attributes.
 - Constraints are manifested in CADM however they exist in current modeling tools and methodology.

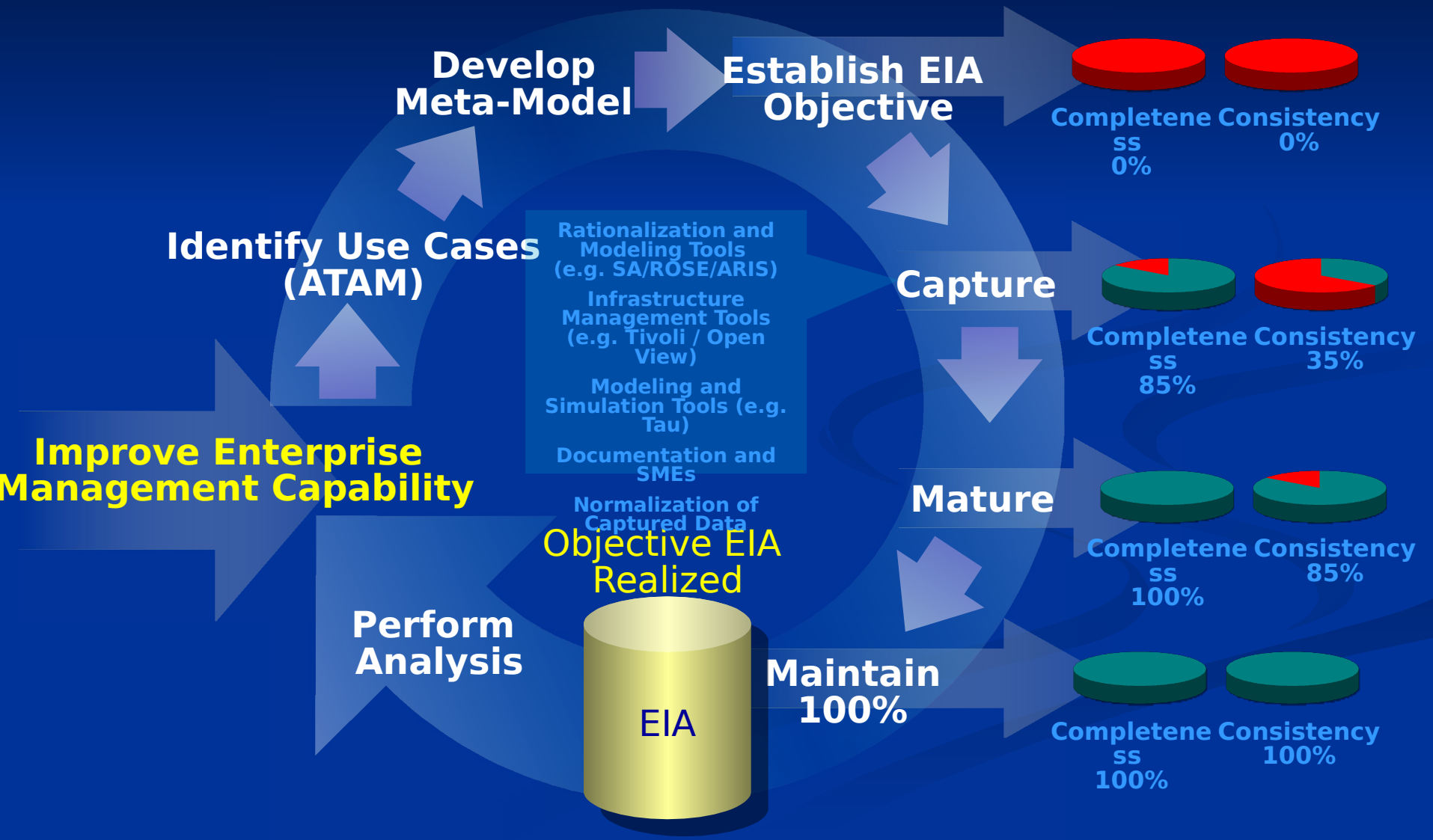
Benefits

- Developing a CADM conforming dB:
 - Focus is shifted to the building not the blueprints.
 - Following the ATAM produces a capability that will satisfy use cases and identify risks.
 - Provides a measurable process in which to evaluate progress towards the end item – an executable integrated architecture.
 - Doesn't eliminate or make obsolete current tools and DoDAF products developed or in process.
 - Provides the capability to develop an analytical environment that is standards based.

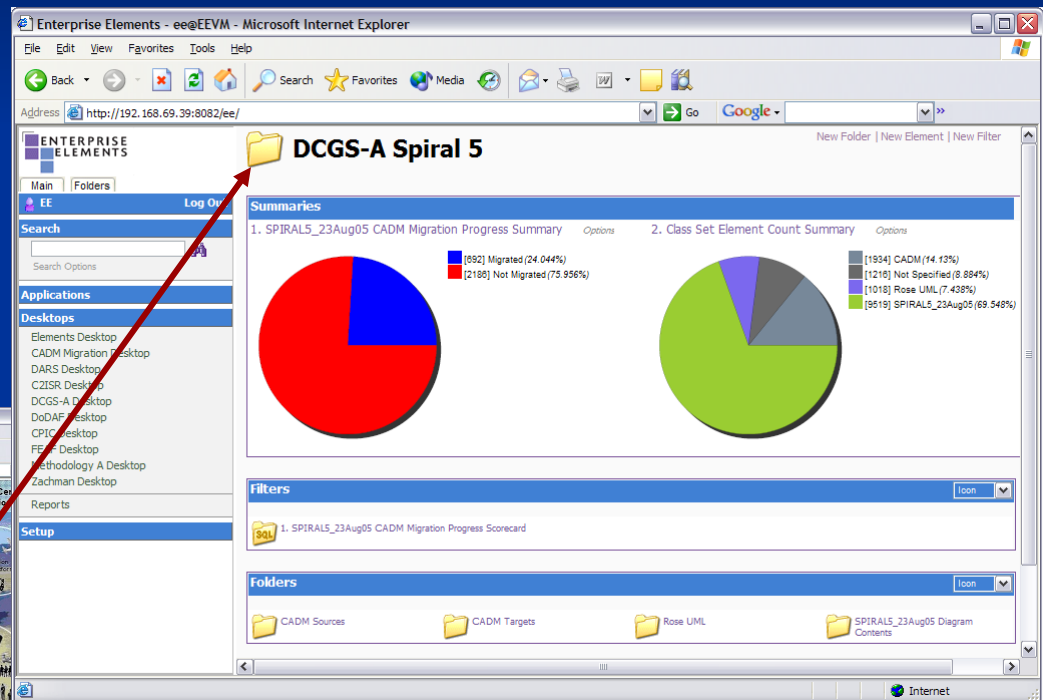
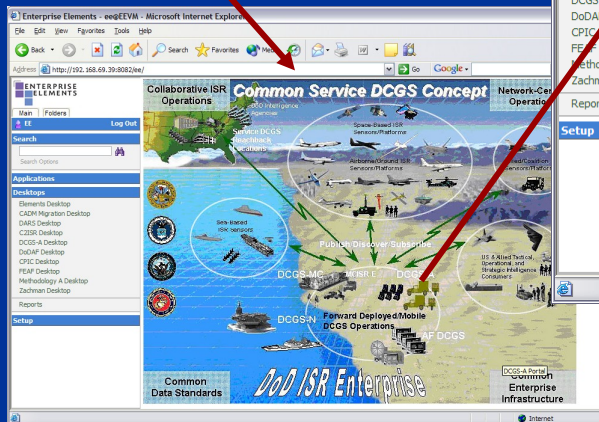
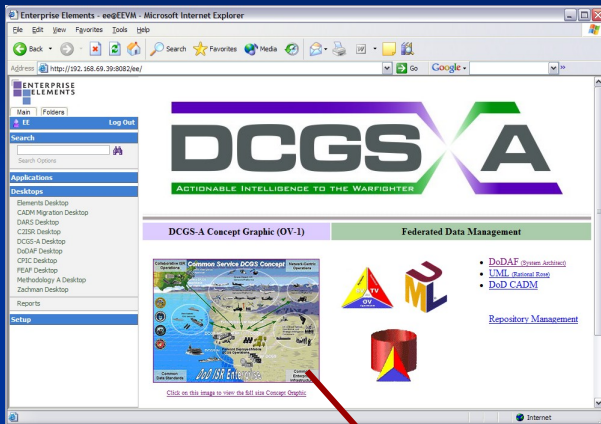
The EIA in the Evolving SALC



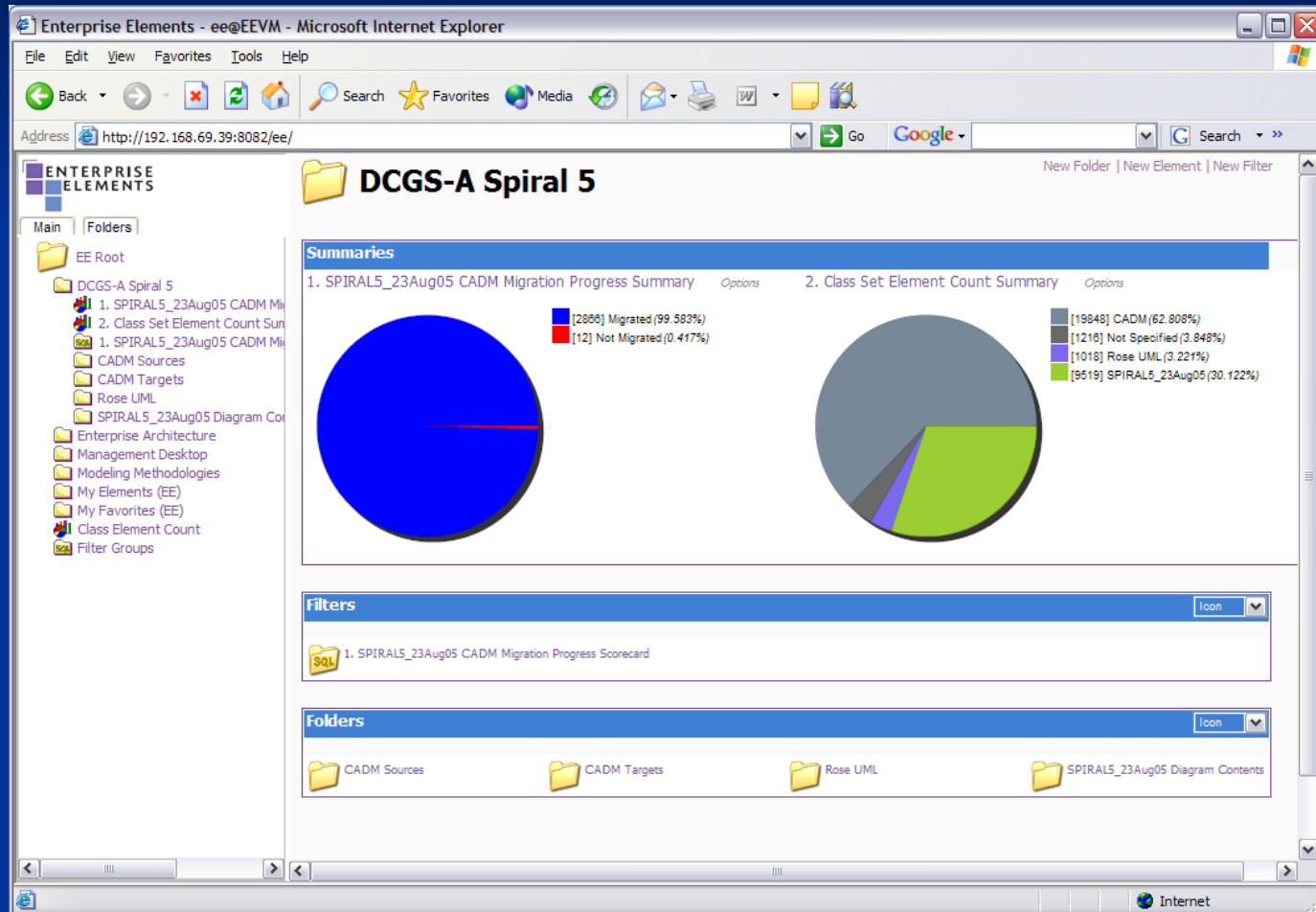
Building an EIA with a Measurable Process



Demonstration: EIA Navigation/Overview

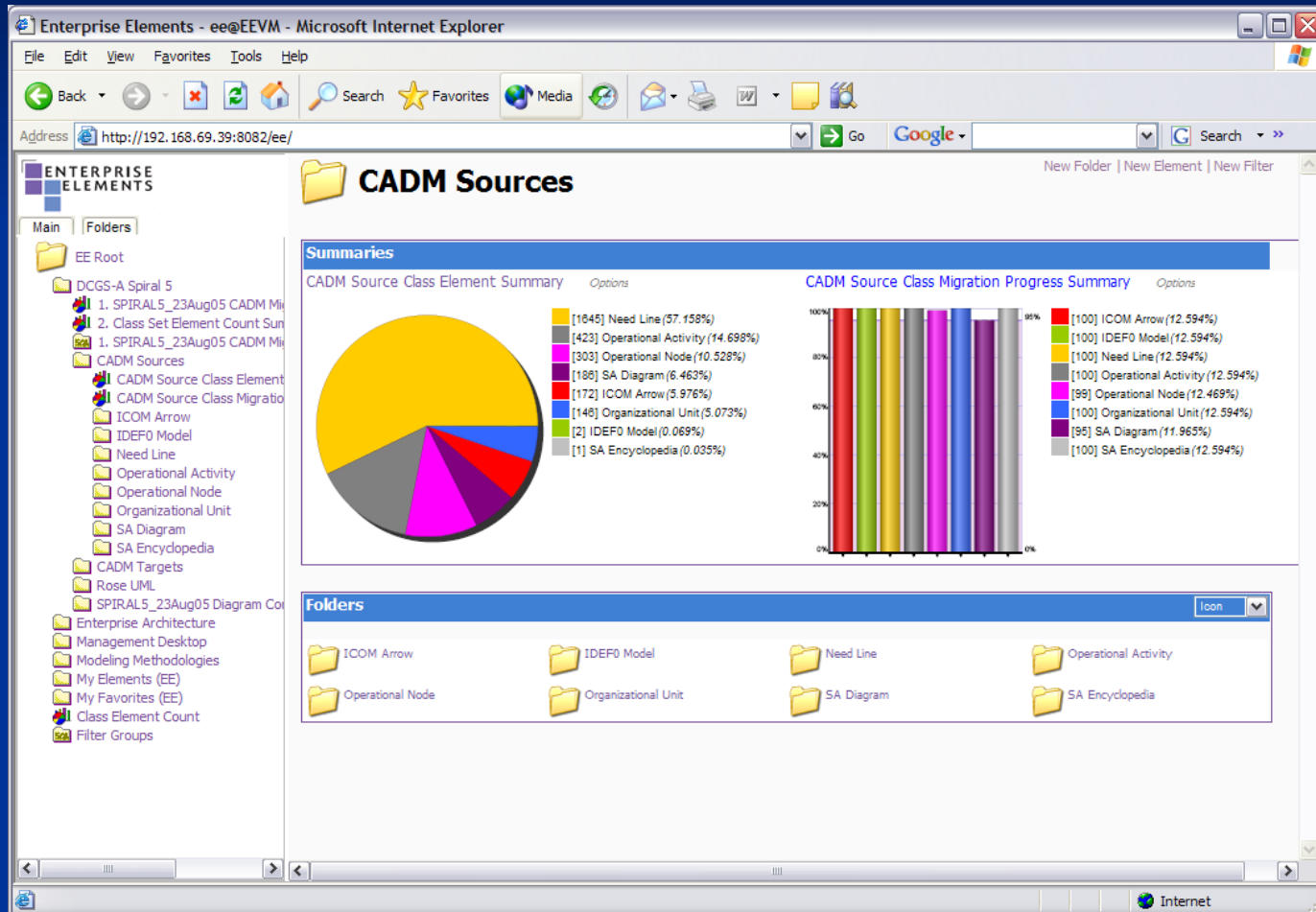


Demonstration: EIA DCGS-A Spiral 5 Overview Desktop Folder



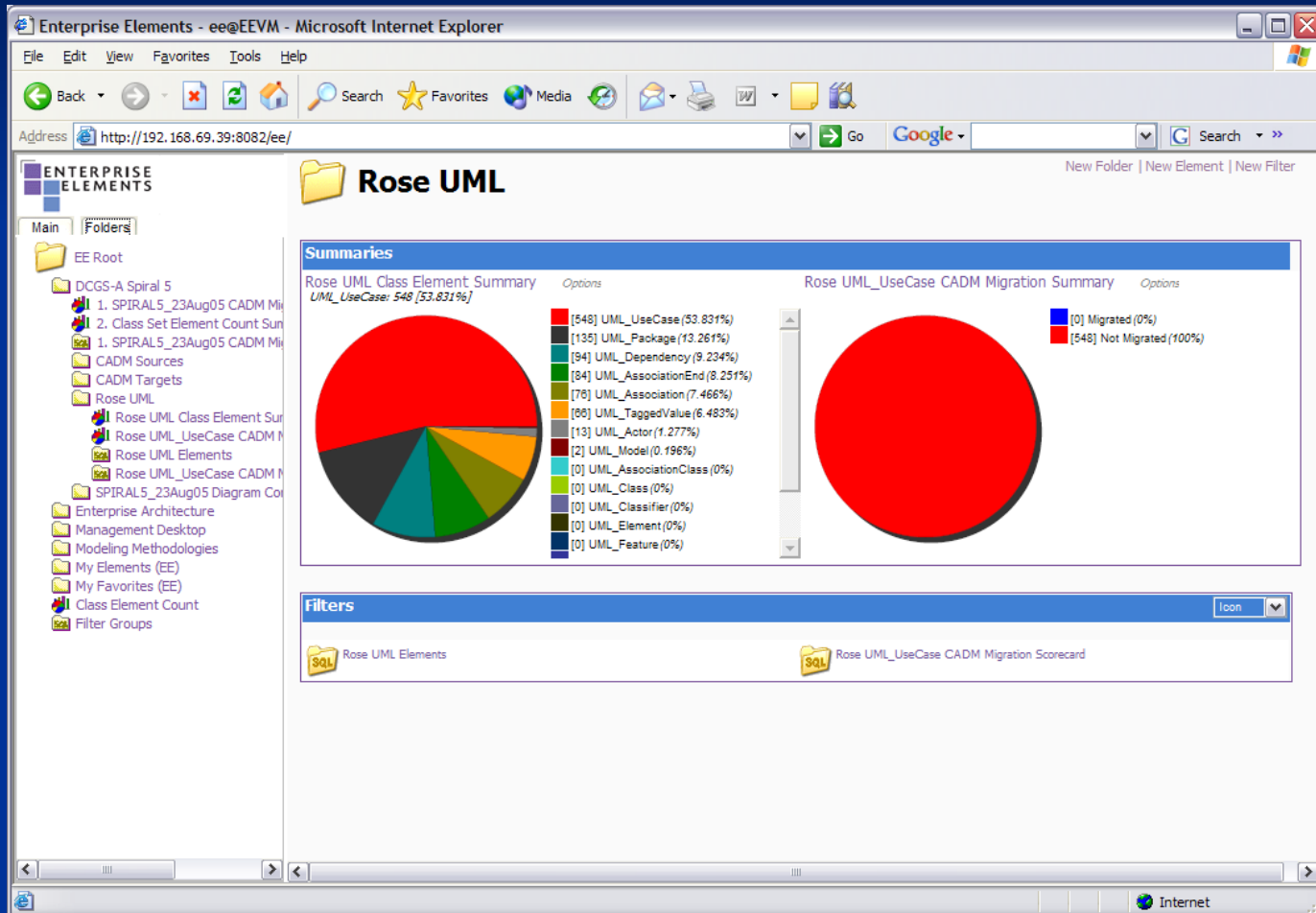
Snapshot of "DCGS-A Spiral 5" Folder After Completion of CADM Migration

Demonstration: EIA Imported System Architect Data Desktop



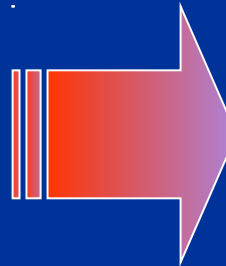
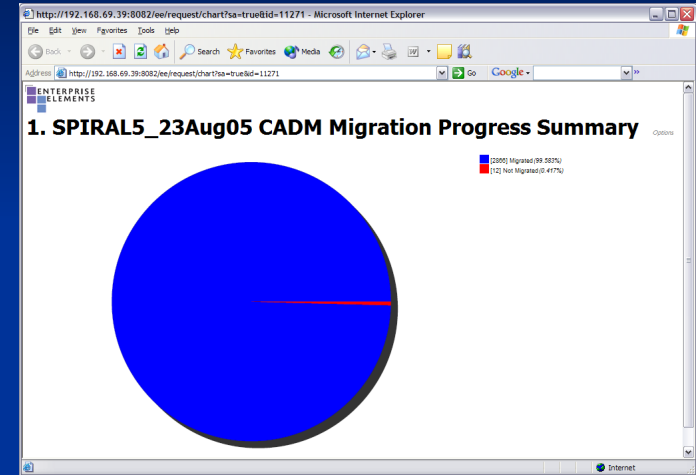
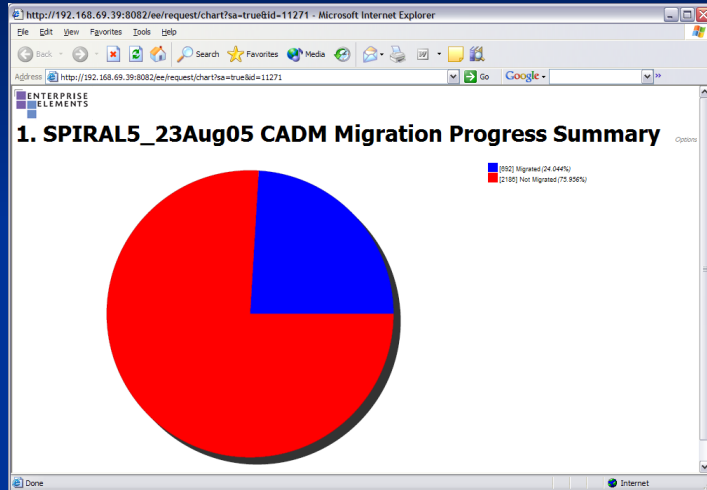
Snapshot of “CADM Sources” Folder (System Architect data) After Completion of CA

Demonstration: EIA Imported Rose Data Desktop



Snapshot of "Rose UML" Folder Prior to Use Case CADM Migration

Demonstration: EIA CADM Migration Progress Views



1. SPIRAL5_23Aug05 CADM Migration Progress Scorecard

Migration Progress Indicator	Name	Migrated Cnt	Total Cnt	Migrated Pct
▶ ICOM Arrow	ICOM Arrow	172	172	100%
▶ IDEF0 Model	IDEF0 Model	2	2	100%
▶ Need Line	Need Line	0	1645	0%
▶ Operational Activity	Operational Activity	423	423	100%
▶ Operational Node	Operational Node	0	303	0%
▶ Organizational Unit	Organizational Unit	0	146	0%
▶ SA Diagram	SA Diagram	94	186	50.538%
▶ SA Encyclopedia	SA Encyclopedia	1	1	100%

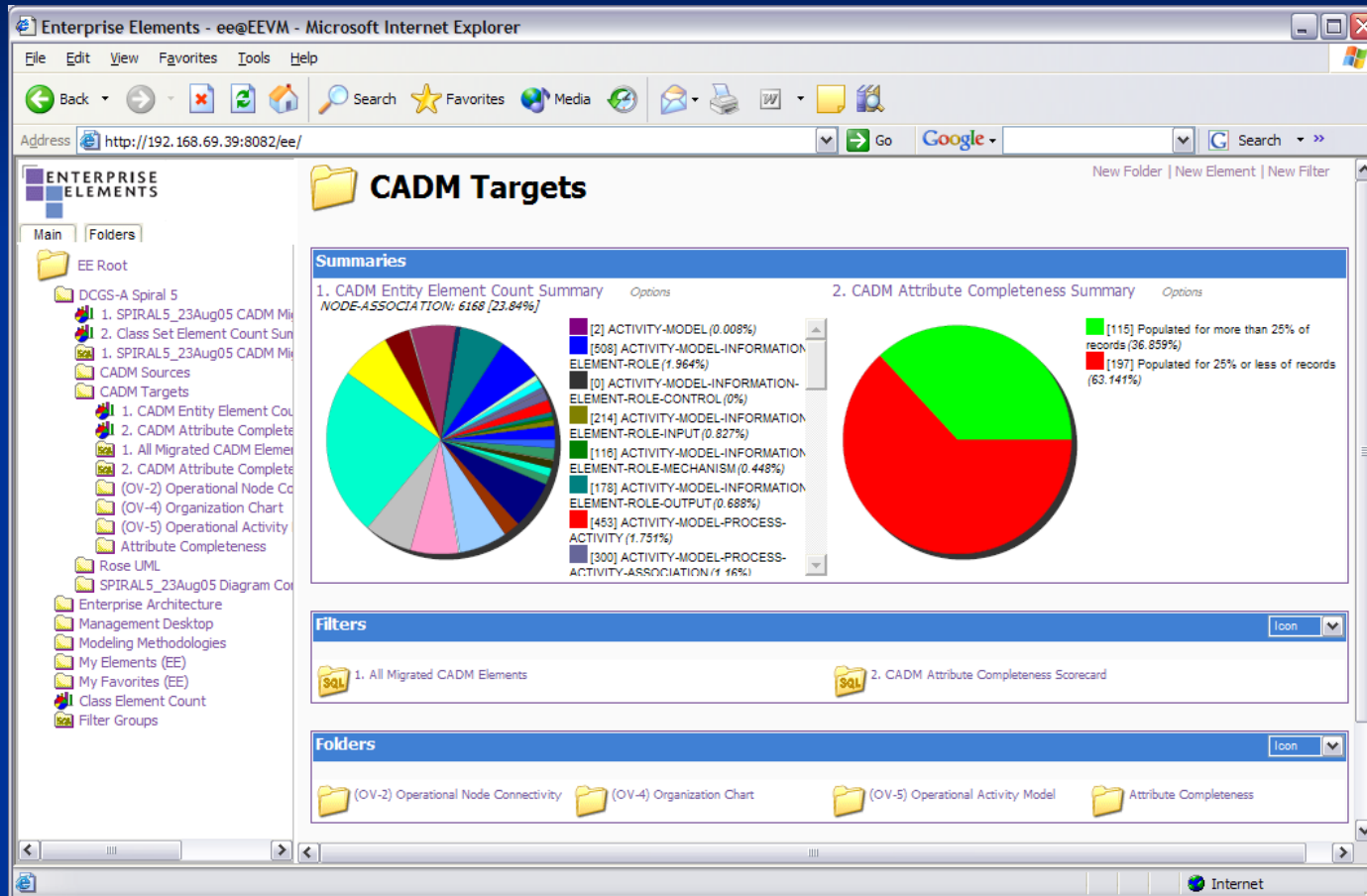
1. SPIRAL5_23Aug05 CADM Migration Progress Scorecard

Migration Progress Indicator	Name	Migrated Cnt	Total Cnt	Migrated Pct
▶ ICOM Arrow	ICOM Arrow	172	172	100%
▶ IDEF0 Model	IDEF0 Model	2	2	100%
▶ Need Line	Need Line	1645	1645	100%
▶ Operational Activity	Operational Activity	423	423	100%
▶ Operational Node	Operational Node	301	303	99.34%
▶ Organizational Unit	Organizational Unit	146	146	100%
▶ SA Diagram	SA Diagram	176	186	94.624%
▶ SA Encyclopedia	SA Encyclopedia	1	1	100%

Progress Snapshot Prior to Full Migration

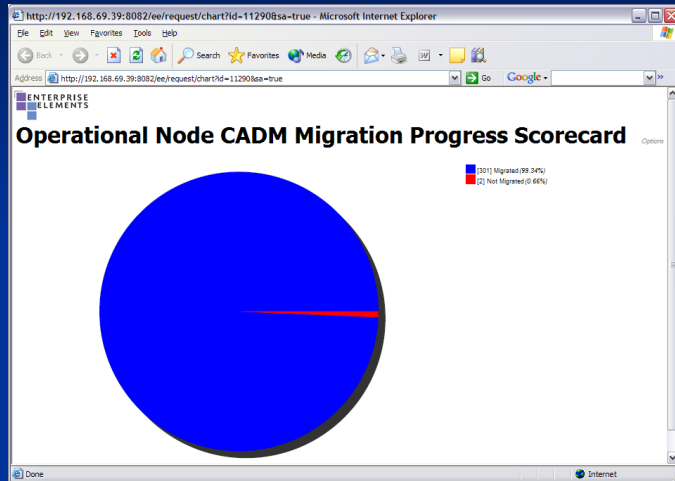
Progress Snapshot After Full Migration

Demonstration: EIA CADM Targets Desktop



Snapshot of "CADM Targets" Folder After Completion of CADM Migration

Demonstration: EIA Completeness/Gap View/Scorecard

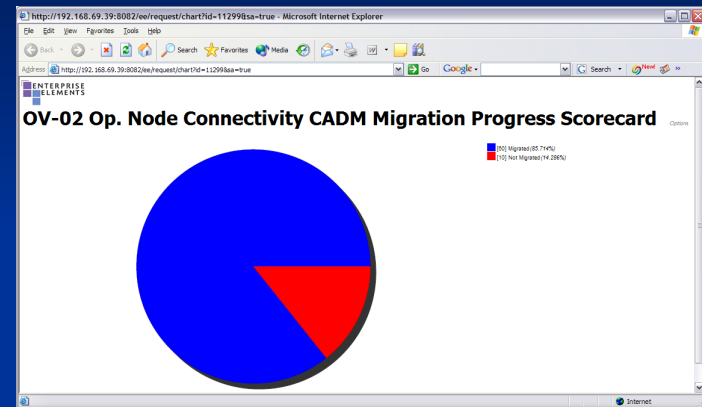


Operational Node CADM Migration Progress Scorecard

Currently viewing items 1 through 25 of 303 Page 1 of 9

Migration Indicator	Node	CADM Migration Status	Element_Id
▲	National Polar Orbiting Environmental Satellite System	Needs Work	
▲	Situation Awareness Team Analysis S&P; Processing Section	Needs Work	
▲	2d /3d Party SIGINT Collectors	CADM Loaded	
▲	ACS IMINT Sensor	CADM Loaded	
▲	ACS SIGINT Sensor	CADM Loaded	
▲	ADJACENT UNITS	CADM Loaded	
▲	ARM Cell	CADM Loaded	
▲	ANTITANK CO	CADM Loaded	
▲	ARMOR BN	CADM Loaded	
▲	ARMOR BN (x2)	CADM Loaded	
▲	ARMOR BN (x2) CDR	CADM Loaded	
▲	ARMOR BN (x2) S1	CADM Loaded	

2 Operational Nodes did not migrate due to length of name in source



OV-02 Op. Node Connectivity CADM Migration Progress Scorecard

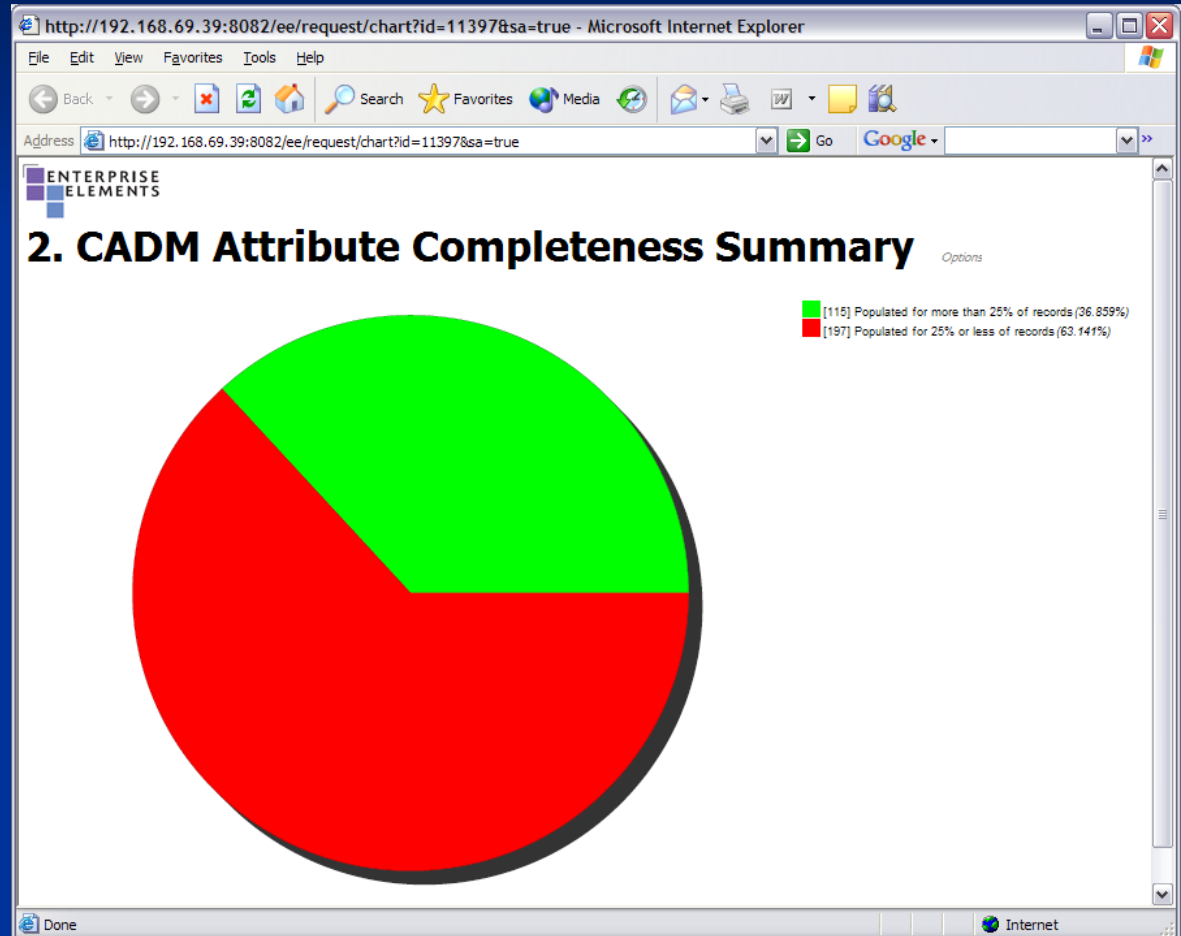
Currently viewing items 1 through 25 of 72 Page 1 of 2

Migration Indicator	Node	CADM Migration Status	Element_Id
▲	UA_Build S&P; Sustain Combat Power Cell	Needs Work	
▲	UA_Collection and Integration Section	Needs Work	
▲	UA_Command Integration Cell	Needs Work	
▲	UA_Fire S&P; Effects Cell	Needs Work	
▲	UA_Intelligence Surveillance and Reconnaissance Cell	Needs Work	
▲	UA_Manuever Support Cell	Needs Work	
▲	UA_Mobile Command Group-1	Needs Work	
▲	UA_Mobile Command Group-2	Needs Work	
▲	UA_NetCentric Operations Warfare	Needs Work	
▲	UA_Situational Awareness Team	Needs Work	
▲	HVY BDE	CADM Loaded	
▲	HVY BDE_ARMOR BN (x2)	CADM Loaded	
▲	HVY BDE_ARTY BN	CADM Loaded	

10 Op. Node Connectivity Diagrams did not migrate due to Op Nodes

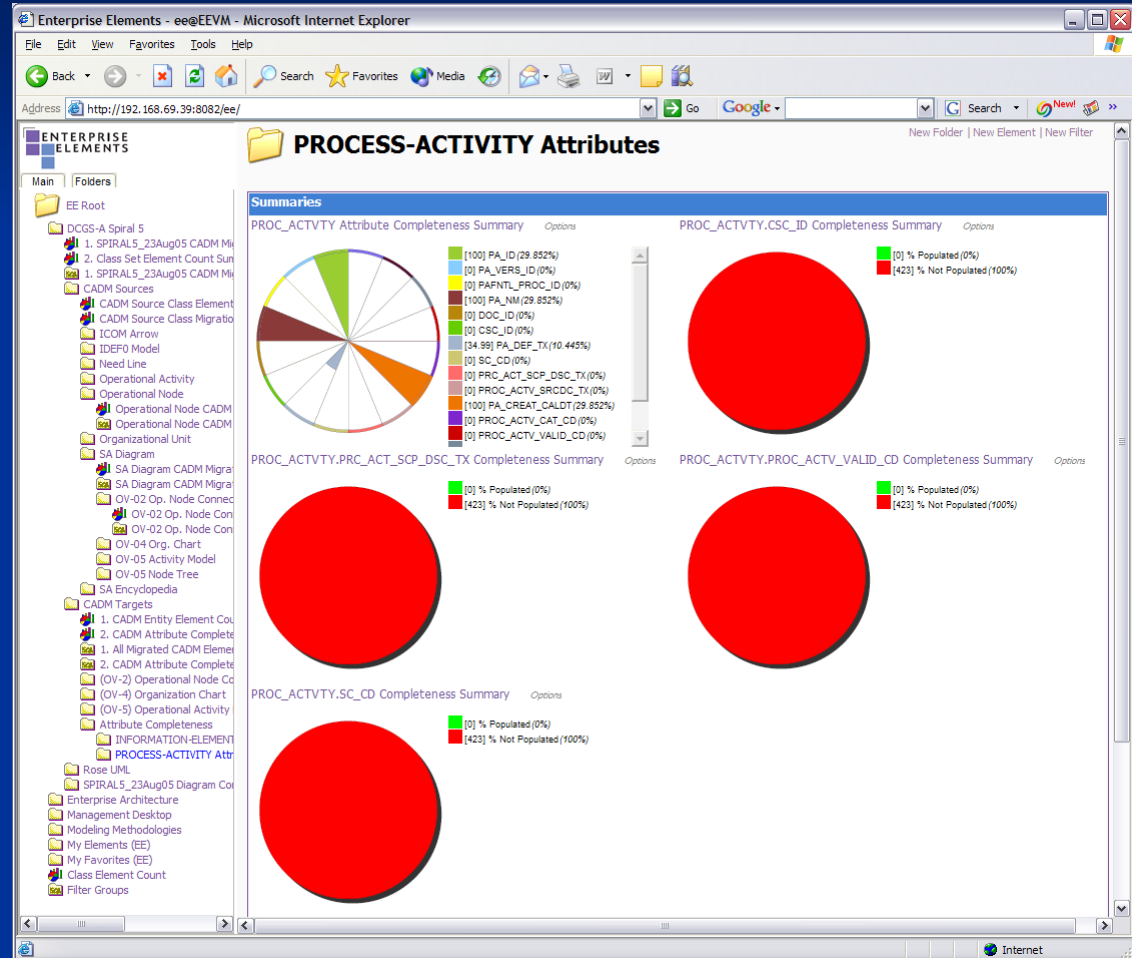
Demonstration: EIA CADM Attribute Completeness

- Example shows Attribute completeness for all populated CADM entities
- In this example, if an attribute is populated for more than 25% of possible records, it is included in the “green” wedge
- List type attributes set to ‘NOT KNOWN’ or ‘NOT SPECIFIED’ are treated as not populated



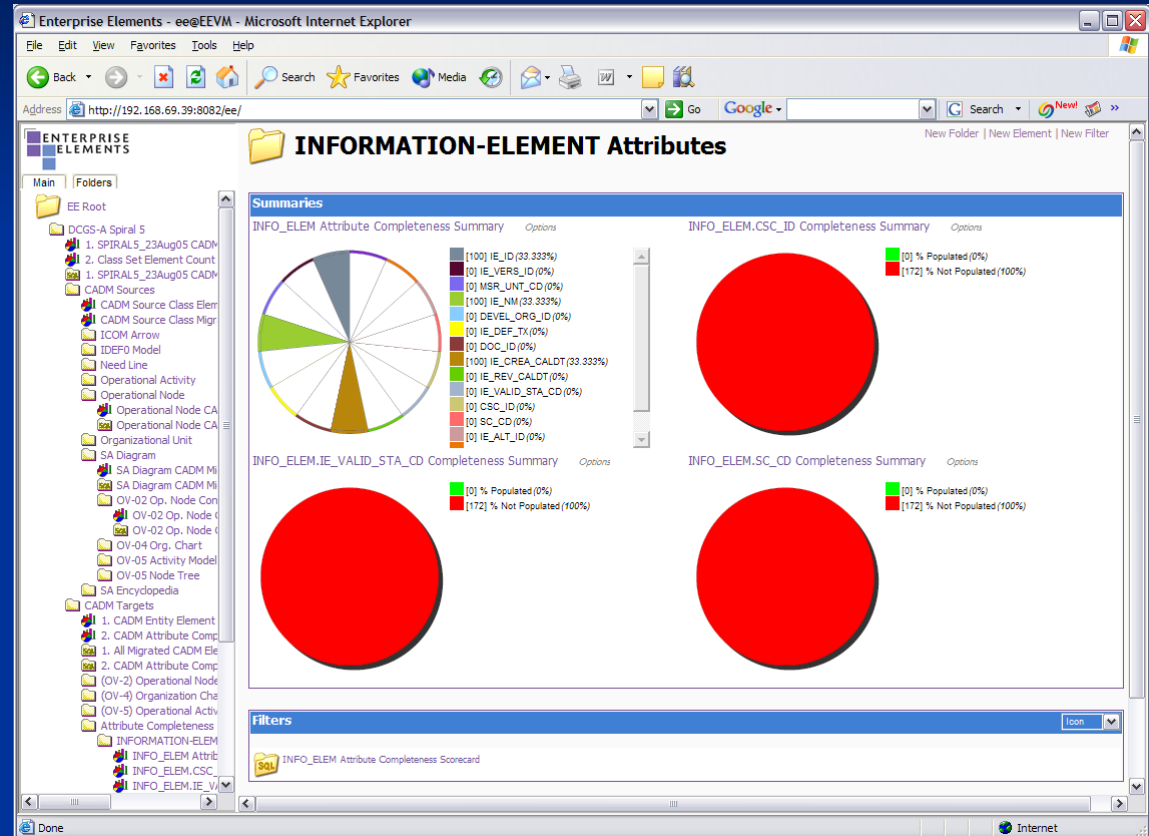
Demonstration: EIA PROCESS-ACTIVITY Attributes of Interest

- First chart shows attribute completeness for all PROCESS-ACTIVITY attributes
- Other charts show completeness summary for the following attributes:
 - CSC_ID
 - SC_CD
 - PRC_ACT_SCP_DS
 - C_TX
 - PROC_ACTV_VALID_CD



Demonstration: EIA INFORMATION-ELEMENT Attributes of Interest

- First chart shows attribute completeness for all INFORMATION-ELEMENT attributes
- Other charts show completeness summary for the following attributes:
 - CSC_ID
 - SC_CD
 - IE_VALID_STA_CD



Demonstration: EIA CADM XML Export

